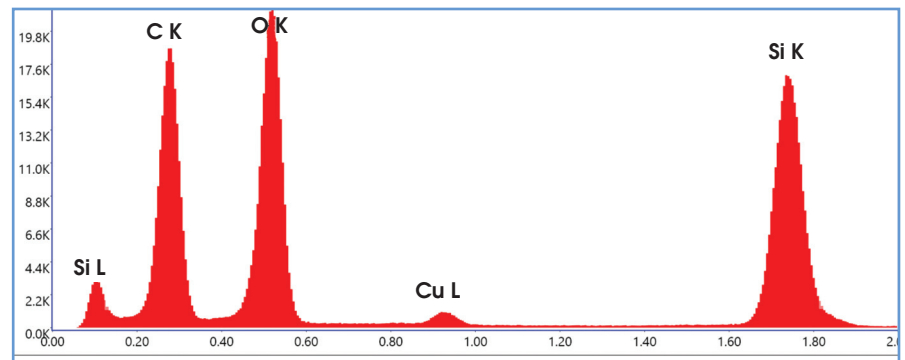


- Elite T Silicon Drift Detector (SDD) Super - 70 mm<sup>2</sup>
- Elite T Silicon Drift Detector (SDD) Ultra - 160 mm<sup>2</sup>
- Unique geometry for optimal performance
- Optimized effective solid angle
- Innovative electronics for best results
- Precision motorized slide
- Optional shutter
- TEM optimized software

The Elite T is the next generation EDS system for transmission electron microscopy (TEM) utilizing a fast SDD with state-of-the-art integrated electronics. The unique geometry and powerful quantification routines of the Elite T provide optimized analysis solutions for all TEM applications.

#### Increased Solid Angle (SA) for Optimal Results

The design of the Elite T EDS System provides an optimized geometry to ensure the best possible performance. Solid angles of greater than 2 steradians (sr) are achievable with the dual detector option, which increases count rates and ensures faster data collection on sensitive samples.

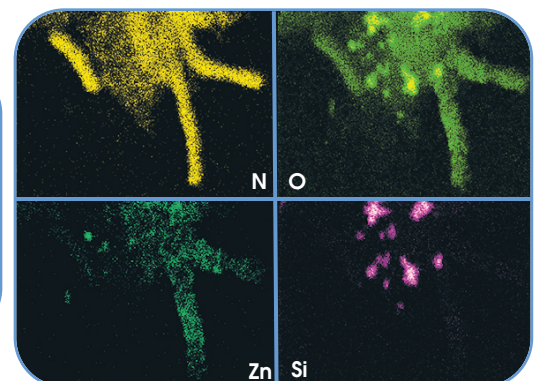


Spectrum showing SiO<sub>2</sub> sample collected by Elite T.

#### Windowless Design

The Elite T detectors are designed specifically not to require the typical protective window in front of the module. This design:

- Improves the light element sensitivity of the detector
- Enhances the mapping speed and light element detection in low concentrations
- Allows flexibility of sensor placement for maximum exposure to the signal



Electron image and element maps from nitrogen containing bacteria, showing light element sensitivity and applications in Life Sciences.

## Specifications

### Elite T EDS System

- Standard resolution
  - Elite T Super:** 127 eV
  - Elite T Ultra:** 129 eV
 or better measured at Mn K $\alpha$  @ 10K cps (ISO 15632:2012)  
Premium options available
- Uniquely designed 70 mm<sup>2</sup> and 160 mm<sup>2</sup> SDD chips optimized for solid angle
- 5 eV/ch and 10 eV/ch flexible acquisition
- Input count rates up to 1.8 Mcps
- Throughput >850 kcps
- Fully-featured TEAM™ EDS Software Suite for TEM applications
  - TEM optimized software
  - Spectrum Survey with EXpert ID
  - Smart Quant with EXpert ID
  - Multipoint Analysis
  - Linescan Acquisition
  - Smart Mapping
  - Smart Data Management
  - EDS Quant Maps and Rebuild
  - Smart Drift Correction
  - Offline Software License

## Features and Benefits

### Integrated data acquisition and signal processing electronics

- Reduces noise for a better signal/noise ratio with improved detection limits

### Intelligence built into detector

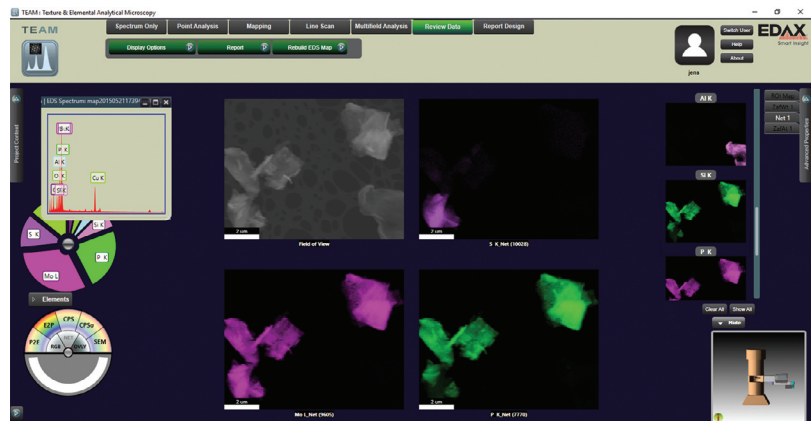
- Automatic retraction to safe position without user intervention

### Automated calibration algorithm

- Fast, repeatable, and accurate setup

### TEAM™ Software Suite allows users to optimize their analysis time and get the best possible data from their sample

- Smart Quant - several powerful quantification routines are implemented in the TEAM™ software
- Smart Track - ensures optimal working conditions on setup
- EXpert ID - revolutionary one-step peak identification program
- Smart Mapping - automatically determines collection time required, and identifies the elements present in the sample
- Smart Drift - monitors and dynamically adjusts parameters to account for drift changes
- Smart Data Management - increases ease of use and provides simple file management



The TEAM™ EDS interface maximizes the display area and allows quick access to all features.

## Conclusion

The Elite T EDS System with TEAM™ software is the most intuitive and easy to use analytical tool for the TEM applications. It offers fully integrated data acquisition and signal processing, coupled with Smart Features to guide set-up and analysis. With the windowless SDDs, which maximize collection efficiency and optimize light element performance, users are certain of achieving the best possible results in challenging TEM conditions.